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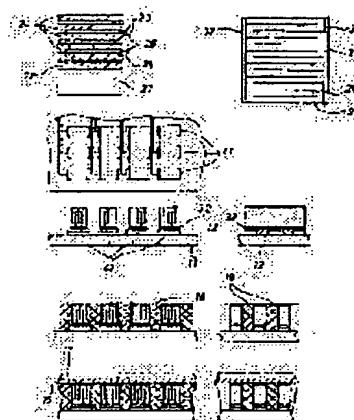
(54) INK JET PRINT HEAD

(57)Abstract:

PURPOSE: To make a piezoelectric device compact easily by providing a print head wherein an end of the piezoelectric device made by layering piezoelectric materials and conductive materials alternately is fixed to a base plate, other end of the device is arranged facing a nozzle opening as a free end, and one electrode for driving the device is formed on the upper layer of the free end of the device.

CONSTITUTION: A finisher's slab 21 is coated with a piezoelectric material 22, provided with a first conductive layer 23 formed on the surface thereof, further coated with a piezoelectric material 24, and coated with a conductive layer 25, which will be other electrode, on the top surface thereof. The coating with the conductive layers and the piezoelectric materials are repeated for necessary number of layers, dried, pressurized and baked so as to form a piezoelectric device 31.

Conductive films 32 and 33 are formed on the faces of the device 31 where the conductive layers 23 and 25 are exposed, and dried. The device 31 is fixed on a base plate 11, on which an electrode pattern 41 to be connected to one electrode 32 is formed with a desired pitch, by a solder 12. Other end of the device is arranged facing a nozzle opening as a free end. The fixed device 31 is notched with the same pitch as the electrode pitch, and gaps thereof are filled with a moisture resistant material 18 until the surface becomes the same as the free end of the device. A conductive material layer is formed as a common electrode 15 on the top surface of the free end of the device, which is further coated with a moisture resistant insulating material 17.



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